zontally, not emotionally excited, not after exercise, not after taking hot food, tea, coffee, or alcohol, and not after the hand and wrist have been warmed or chilled. The pressure should not be read when it is first raised, but after it has oscillated up and down several times, since this gives a more accurate index, especially in the leg arteries. The reappearance of the pulse gives the pressure more exactly than the disappearance.

The Examination of the Eye-grounds in the Differential Diagnosis between Pernicious Anemia and Severe Secondary Anemia.—Hesse (*Deutsch. med. Woch.*, 1909, xxxv, 1394) calls attention to the fact that in the diagnosis of pernicious anemia the examination of the retina is of great value, especially in those cases in which the blood picture is indefinite. In 47 out of 50 cases of pernicious anemia, retinal hemorrhages were found to be present; while in 51 cases of severe secondary anemia, in which the hemoglobin was below 50 per cent., and in 121 cases with a hemoglobin of 50 per cent. to 70 per cent., retinal hemorrhages were never found. In 64 instances of malignant tumor (43 of carcinoma and 29 of gastric carcinoma), in which there is especially liable to be confusion with pernicious anemia, he never saw retinal hemorrhages. Hesse believes not only that the presence of hemorrhages favors the pernicious type of anemia, and their continued absence a secondary anemia, but that they are of prognostic importance as well. In general the retinal hemorrhages are larger and more numerous in the severe cases, and the clearing up of the hemorrhages is one of the earliest indications of beginning improvement.

Nodal Bradycardia.—In the new English journal devoted to the circulation (*Heart*, 1909, i, 23) Mackenzie describes a hitherto unnoted type of bradycardia in which venous tracings show no wave due to the contraction of the auricle, and in which he believes the stimulus of the heart's contraction arises not, as normally, in the great veins, but in the auriculoventricular node, causing a simultaneous contraction of auricles and ventricles. In the four cases reported, the bradycardia was either temporary or permanent. The heart's rate averaged 30 to 40 per minute, and the rhythm was regular or irregular, with frequent long pauses. Two of the patients had attacks of syncope and convulsions, so that they simulated closely cases of heart-block (Adams-Stokes syndrome), but the venous tracings never showed evidence of disturbed conduction, nor was there any pulsation in the veins due to auricular systole. This type of bradycardia may arise suddenly in a heart previously showing a normal rhythm, or it may arise in a heart previously showing the nodal rhythm of the usual type, with the rate more frequent than normal.

Clinical Symptoms of Hypertrophy of the Left Ventricle.—Kurt (*Wien. klin. Woch.*, 1909, xxii, 1120) calls special attention to the significance of the heaving apex impulse as a sign of left ventricular hypertrophy. As evidence of moderate hypertrophy he believes the accentuation of the first sound over the left ventricle, just above the apex, to be of considerable importance. Normally, the first sound is less loud over the left ventricle than over the conus of the right ventricle. He found this accentuation of the first sound to be present in cases of hypertrophy following exercise, pregnancy, old age, and associated with obesity, certain valvular lesions, early arteriosclerosis, and nephritis. It was not present in cases of orthostatic albuminuria. The weakening of the first sound, so frequently noticed with the heaving impulse of marked hypertrophy, he considers to be chiefly a matter of poor sound conduction.

The Rise of Blood Pressure in Nephritis.—MARCUSE (*Berlin. klin. Woch.*, 1909, xlvi, 1352) bases his theory of the rise of blood pressure in nephritis on the investigations of Wiesel and Schur as to the presence of adrenalin in the blood of patients suffering from nephritis. He suggests that the renal inflammation causes an obstruction to the flow of blood in both kidneys, and that as a result of this there is an increased flow of blood in the inferior suprarenal artery, which is a collateral of the renal artery. The consequent hyperemia of the adrenals would lead to their hypertrophy, and with this would come an increase in the production of adrenalin which would cause a rise of blood pressure.

Effect of the Injection of Bile on the Circulation.—While it has been generally considered that the slowing of the pulse and the lowering of blood pressure in obstructive jaundice is caused by the retention of bile salts, KING and STEWART (*Jour. Exper. Med.*, 1909, xi, 673) have shown, by the intravenous injection of whole bile and of its constituents into dogs, that these substances play a very unimportant part. The injection of pig's whole bile caused a preliminary rise in blood pressure, then a progressive fall, followed by a slowing of pulse rate. The bradycardia is due to heightened vagus tone, as it is relieved by cutting the vagi, or by the administration of atropine. The injection of an amount of sodium gylcocholate somewhat in excess of that contained in a lethal dose of whole bile produced no circulatory effects. The injection of bile pigment (biliverdin), however, produced all the effects of the injection of whole bile, except for the initial rise of blood pressure, and the lethal dose of uncombined pigment corresponded almost exactly to the amount of pigment contained in a lethal dose of whole bile. Experiment also showed that when the bile pigment is in chemical combination with calcium or sodium, a comparatively non-toxic compound is formed. To study the role of calcium in the action of pigment further, obstructive jaundice was produced in dogs by tying the common bile duct. An analysis of the tissues then showed a definite increase in the calcium content of the blood, and a definite diminution of calcium in muscle, liver, and brain. They believe that the bile pigments circulating in the blood in obstructive jaundice absorb the available calcium from the organs and tissues, and by combination with it render themselves less toxic.

The Influence of the Thyroid on Carbohydrate Metabolism.—KING'S experiments (*Jour. Exper. Med.*, 1909, xi, 665) relate to the interaction of the thyroid and pancreas. Clinically, glycosuria is not uncommon in exophthalmic goitre, while in myxœdema it practically